Peak ground acceleration map, Southwest Yilgarn

by

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Abstract

The peak ground acceleration (PGA) map for the Southwest Yilgarn has been extracted from National Seismic Hazard Assessment (NHSA) map 2018 (Allen 2018).

The NSHA18 hazard map shows the horizontal PGA (expressed as a proportion of the gravitational acceleration, g) for a 10% probability that is, it exceeded in 50 years, equivalent to 1 in 475 probability of exceedance in a given year. This assumes a substrate of soil of Standards Australia AS1170.4 Soil Class Be which has a shear wave velocity of 760 m/s in the uppermost 30 m of the crust. The data is gridded at 15 km spacing (Fig. 1).

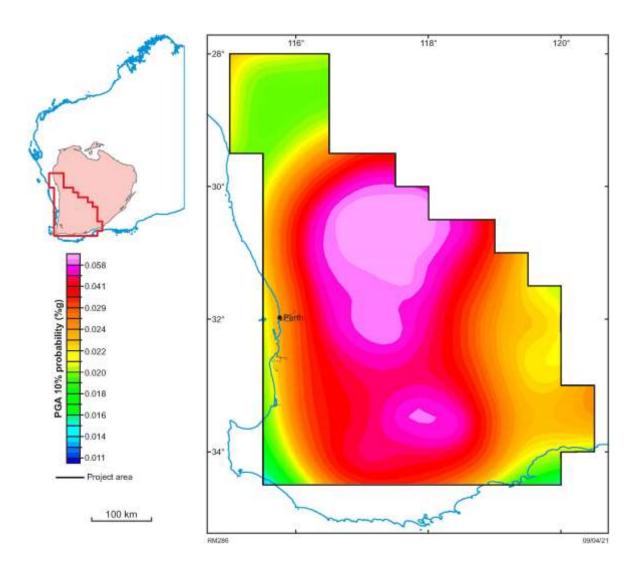


Figure 1. The peak ground acceleration (PGA) map for the Southwest Yilgarn

How to access

The data layer is best accessed using **GeoVIEW.WA**. This online interactive mapping system allows data to be viewed and searched together with other datasets, including Geological Survey of Western Australia and Geoscience Australia geochronology data, geological maps and mineral exploration datasets. The **Peak ground acceleration map**, **Southwest Yilgarn** digital data are also available as a free download from the **Data and Software Centre** via Datasets — Statewide spatial datasets — Geology — Peak ground acceleration map as ESRI shapefiles and MapInfo TAB files.

References

Allen, TI 2018, The 2018 National Seismic Hazard Assessment for Australia: Data package, maps and grid values, Geoscience Australia Record 2018/33, doi:10.11636.

Recommended reference

Murdie RE 2020, Peak ground acceleration map for the Southwest Yilgarn: Geological Survey of Western Australia, digital data layer.



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